Cotton/Soybean Insect Newsletter

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Pest Patrol Alerts

The information contained herein each issue is available via text alerts that direct users to online recordings. I will update the short message weekly for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter "y" to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter

When noteworthy events happen the in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at **@bugdocisin** on Twitter.

News from Around the State

Jonathan Croft, county agent in Orangeburg County, had no reports of insect problems in his area this week. **Charles Davis**, county agent in Calhoun County, reported that he has "seen fairly good numbers of beneficial insects this week, mostly lady beetles." Charles also saw aphids starting to build in cotton, observed ants taking water/sap from the extrafloral nectaries on cotton leaves, and had a good eye to see his first bollworm egg of the season in the crop.

Cotton Situation

As of 14 June 2020, the USDA NASS South Carolina Statistical Office estimated that about 90% of the crop has been planted, compared with 83% at this time last week, 99% at this time last year, and 95% for the 5-year average. About 14% of the crop is squaring, compared with 4% at this time last week, 19% at this time last year, and 13% for the 5-year average. The condition of the crop was described as 8% excellent, 47% good, 20% fair, 11% poor, and 14% very poor. These are observed/perceived state-wide averages.

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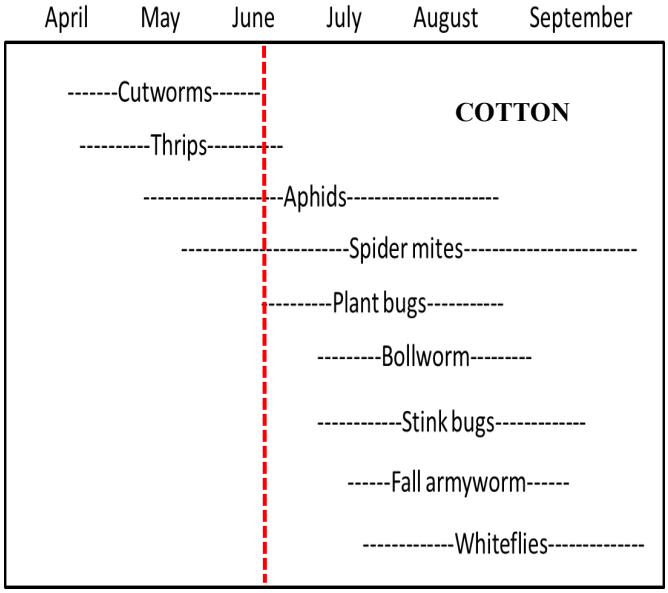
Cotton Insects



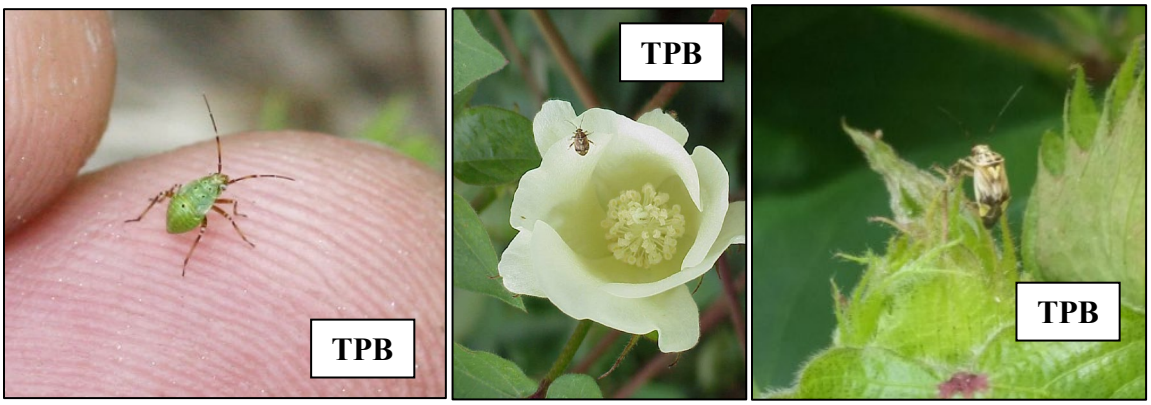
Notice on the chart to the right where we are in the season and what insects are typically an issue for us currently. We are leaving thrips and cutworms, getting well into a window of susceptibility to aphids and spider mites, and are sliding into seeing plant bugs as potential pests, as the crop puts on pre-floral buds (squares) and pushes on to first bloom. But, before we leave the impact of thrips, I wanted to share a photo documenting differences in biomass where we used different at-plant treatments for thrips this season. Comparisons of an untreated control, a seed treatment (imidacloprid – Gaucho), and aldicarb (AgLogic) were dramatic. Check out the photos below of plants we excavated from plots at 42 DAP. The Gaucho seed treatment was much better than the UTC, but AgLogic was even better in terms of above- and below-ground biomass. We will see what happens with yields.

42 DAP

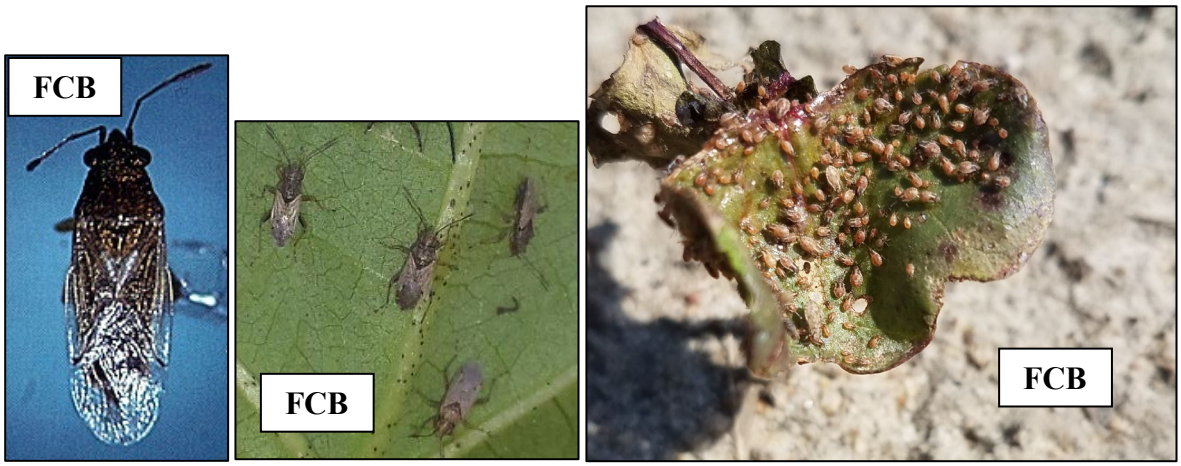
Aldicarb (AgLogic) 5 lb/acre (left)
Imidacloprid (Gaucho) seed treatment (right)

Imidacloprid (Gaucho) seed treatment (left)
Untreated control (right)

I am hearing of some confusion about recognizing and differentiating between tarnished plant bug (TPB) and false chinch bug (FCB), so here are some photos of each. Adults of TPB have a tarnished appearance and a small, pale "letter V" on the on the dorsum (back or top side). Immatures (nymphs) of TPB are green, and, when they are small, they crawl very quickly on a drop cloth (use a black cloth, as it makes detecting them easier). When small, they look like green aphids, but TPB move very quickly – aphids move very slowly. When TPB nymphs reach the last immature stage, you can see developing wings (wing pads), and there are 5 black dots on the dorsum (see photo below). False chinch bugs are dark gray with lighter wings, are much "thinner" than TPB, and do not have the "tarnished" appearance.



Tarnished plant bug (late instar nymph – left, adult on cotton bloom – center, and adult on bract – right.



False chinch bug (adults – left and center, immatures on untreated cotton cotyledons – right)

Don't confuse the two species. Tarnished plant bug is more important than false chinch bug, as TPB can feed directly on squares and cause fruit loss. FCB can be very numerous and almost swarm on cotton plants, but they cause far less injury and only need to be controlled at very high levels on stressed plants. Monitor square retention, and sweep for plant bugs. You must be able to tell the two species apart!

So, right now, monitor square retention, sweep for TPB, and just pay attention to other insects, such as FCB. We let most populations of FCB go without applying any insecticide.

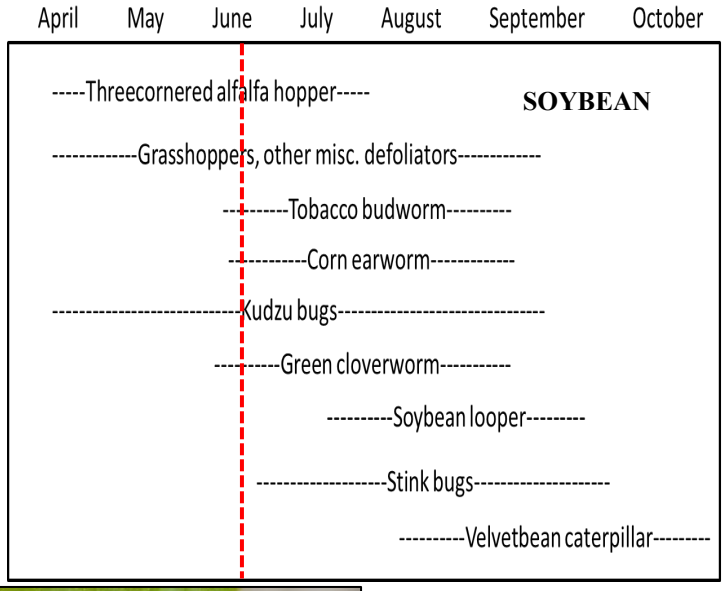
Continue to monitor for aphids and spider mites. Start looking for infestations of aphids and symptoms of the Cotton Leaf Roll Dwarf Disease (CLRDD) we have been discussing in recent years. We will talk more about these issues for the next couple of weeks.

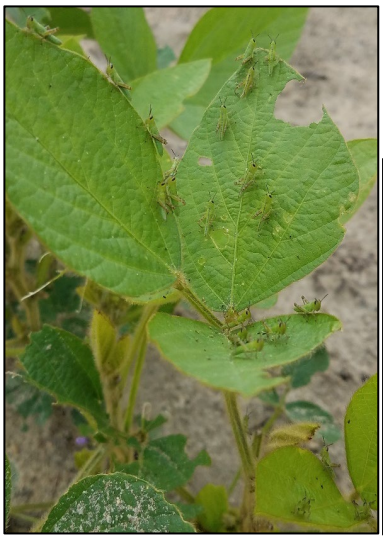
Soybean Situation

As of 14 June 2020, the USDA NASS South Carolina Statistical Office estimated that about 67% of the crop has been planted, compared with 54% the previous week, 64% at this time last year, and 71% for the 5-year average. About 52% of the crop has emerged, compared with 40% the previous week, 48% at this time last year, and 54% for the 5-year average. The overall condition of the crop was not yet described. These are observed/perceived state-wide averages.

Soybean Insects

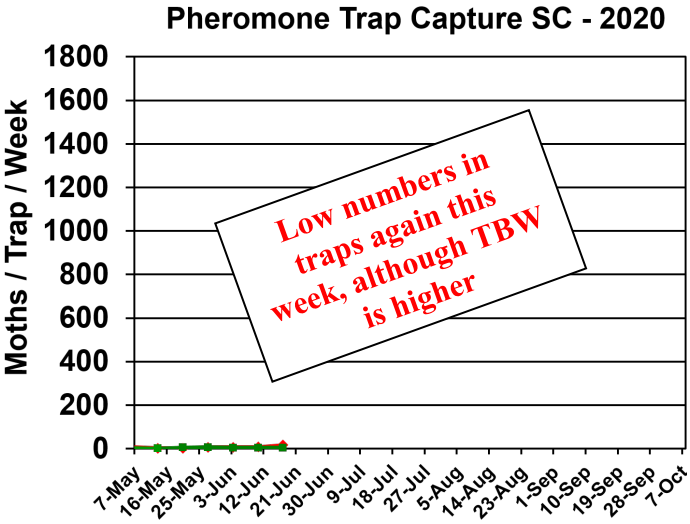
Arthropods do not seem to be causing widespread issues in soybeans again this week. About the only insects I can see, that don't seem to be doing too much damage right now, are these immature grasshoppers. Continue to look for threecornered alfalfa hoppers, kudzu bugs, and any other insect that likes to feed on vegetative soybeans. We observed a few green cloverworms in our sampling this week, so we will start talking about identifying the moths and caterpillars next week.

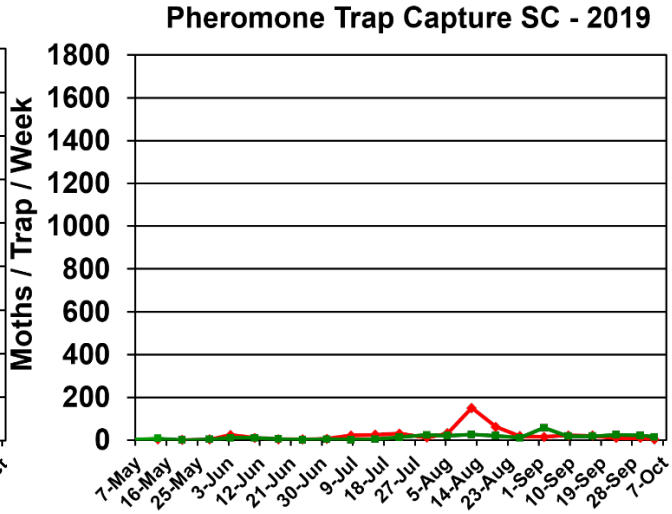




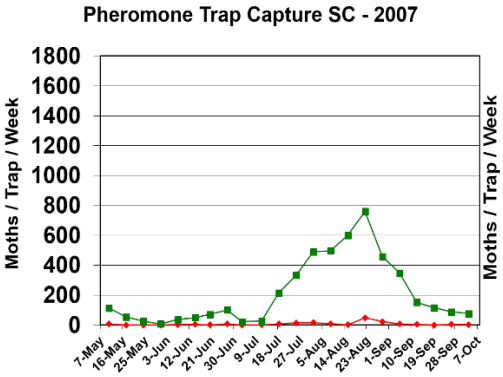
Bollworm & Tobacco Budworm

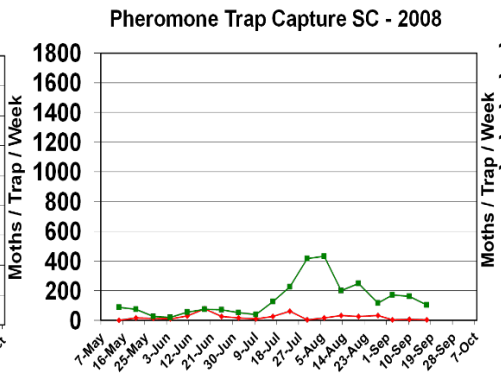
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2019 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.

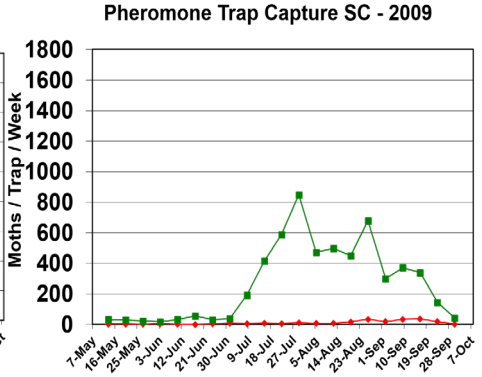


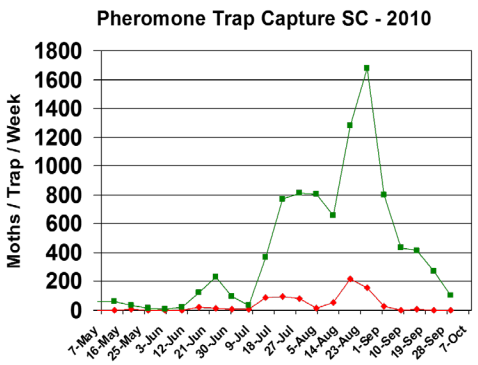


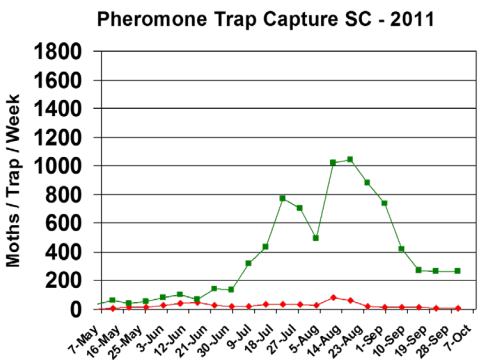
Trap data from 2007-2018 are shown below for reference to other years of trapping data from EREC:

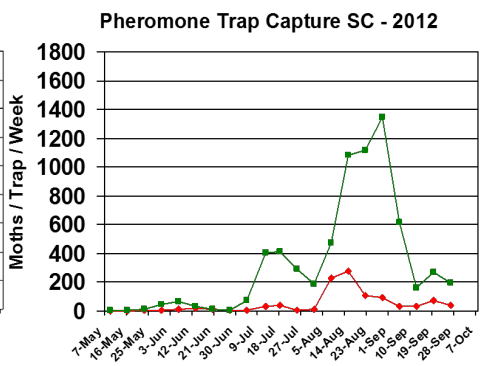


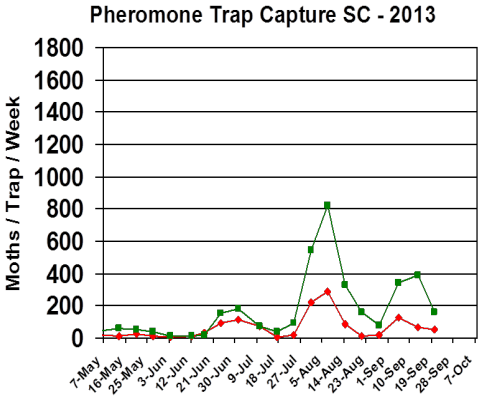


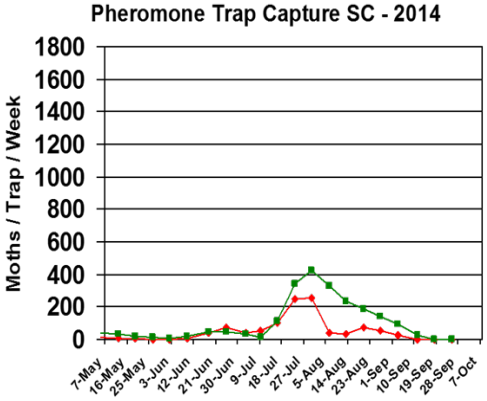


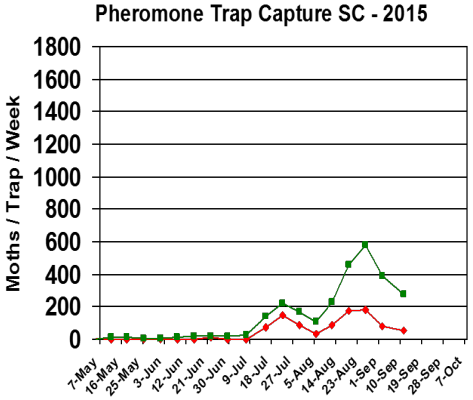


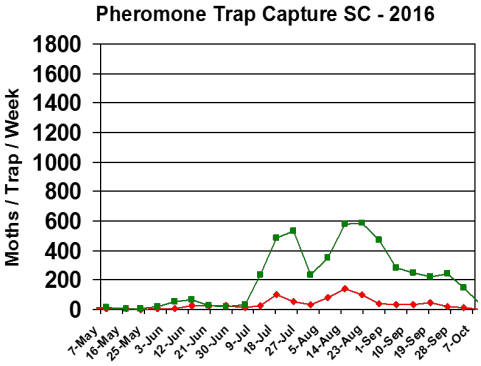


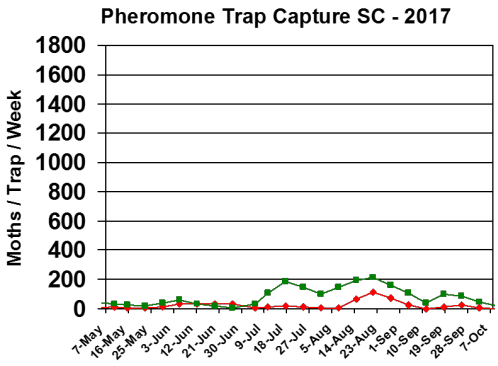


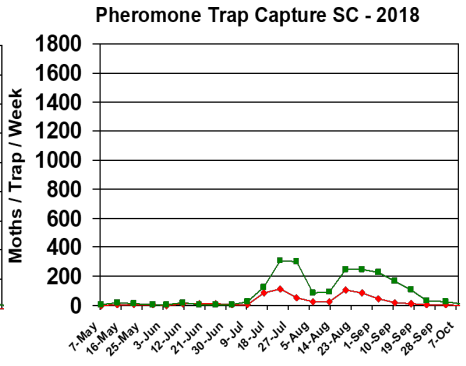








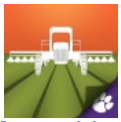




Pest Management Handbook – 2020

Insect control recommendations are available online in the 2020 South Carolina Pest Management Handbook at:
https://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html

Free Mobile Apps: "Calibrate My Sprayer" and "Mix My Sprayer"



Download our free mobile apps called "Calibrate My Sprayer" and "Mix My Sprayer" that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats):
http://www.clemson.edu/extension/mobile-apps/

Need More Information?

For more Clemson University Extension information: http://www.clemson.edu/extension/

For historical cotton/soybean insect newsletters:
https://www.clemson.edu/extension/agronomy/cotton1/newsletters.html

Sincerely,

Jeremy K. Greene, Ph.D.
Professor of Entomology

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